16

CLAIMS:

- 1. A recording apparatus for recording digital information signals on a removable rewritable disc like recording medium, the medium comprising a user area for recording user data represented by the digital information signals and for recording first file system data comprising directory and file entries pointing to the user data according to rules of a first file system, a spare area outside the user area comprising replacement areas for defect management, a table area outside the user area for recording a defect table comprising a list of addresses of the replacement areas and defect areas in the user area, a general application area outside the user area and outside the spare area for recording second file system data comprising directory and file entries pointing to the user data according to rules of a second file system, the recording apparatus comprising
 - input means for receiving the digital information signals;
 - recording means for recording the digital information signals on the medium;
 - reading means for reading recorded digital information signals recorded on the medium;
 - output means for outputting the read digital information signals;
- control means for controlling recording the digital information signals,
 characterized in that the control means are adapted to mark a part of the medium as unusable in the defect table and to record the second file system data in the part of the medium marked as unusable.

20

15

5

10

2. A recording apparatus as claimed in claim 1, characterized in that the control means are adapted to mark at least a part of the spare area as unusable in the defect table and to record the second file system data in the at least the part of the spare area marked as unusable.

25

3. A recording apparatus as claimed in claim 2, characterized in that the control means are adapted to search the defect table for a replacement area address of a replacement area comprising recorded user data, to localize the replacement area according to the replacement area address, to search the defect table for a free replacement area address of a

free replacement area without the user data, to localize the free replacement area according to the free replacement area address, to read the recorded user data from the replacement area, to record the user data read from the replacement area in the free replacement area and to mark the replacement area as unusable in the defect table.

5

- 4. A recording apparatus as claimed in claim 1, characterized in that the control means are adapted to mark a part of the user area as unusable in the defect table and to record the second file system data in the part of the user area marked as unusable.
- 5. A recording apparatus as claimed in claim 4, characterized in that the control means are adapted to search the defect table for a free replacement area address of a free replacement area without the user data, to localize the free replacement area according to the free replacement area address, to read recorded user data from the part of the user area, to record the user data read from the part of the user area in the free replacement area and to mark the part of the user area as unusable in the defect table.
 - 6. A recording apparatus as claimed in claim 1, characterized in that the control means are adapted to collect change information related to changes of the first file system data or of the second file system data and to modify the first file system data or the second file system data in dependence on the change information.
 - 7. A recording apparatus as claimed in claim 6, characterized in that the control means are adapted to record the change information on the medium.
- 8. A recording apparatus as claimed in claim 1, characterized in that the control means are adapted to collect status information related to changes of the defect table and to modify the second file system data in dependence on the status information.
- 9. A recording apparatus as claimed in claim 8, characterized in that the control
 30 means are adapted to record the status information on the medium.
 - 10. A method of recording digital information signals on a removable rewritable disc like recording medium, the medium comprising a user area for recording user data represented by the digital information signals and for recording first file system data

18

comprising directory and file entries pointing to the user data according to rules of a first file system, a spare area outside the user area comprising replacement areas for defect management, a table area outside the user area for recording a defect table comprising a list of addresses of the replacement areas and defect areas in the user area, a general application area outside the user area and outside the spare area for recording second file system data comprising directory and file entries pointing to the user data according to rules of a second file system, the method characterized by

- marking a part of the medium as unusable in the defect table;
- recording the second file system data in the part of the medium marked as unusable.

10

30

- 11. A method as claimed in claim 10, characterized in that the part of the medium comprises at least a part of the spare area.
- 12. A method as claimed in claim 11, characterized by
- searching the defect table for a replacement area address of a replacement area comprising recorded user data;
 - localizing the replacement area according to the replacement area address;
 - searching the defect table for a free replacement area address of a free replacement area without the user data;
- localizing the free replacement area according to the free replacement area address;
 - reading the recorded user data from the replacement area;
 - recording the user data read from the replacement area in the free replacement area;
 - marking the replacement area as unusable in the defect table.
- 25 13. A method as claimed in claim 10, characterized in that the part of the medium comprises a part of the user area.
 - 14. A method as claimed in claim 13, characterized by
 - searching the defect table for a free replacement area address of a free replacement area without the user data;
 - localizing the free replacement area according to the free replacement area address;
 - reading recorded user data from the part of the user area;
 - recording the user data read from the part of the user area in the free replacement area;

19

- marking the part of the user area as unusable in the defect table.
- 15. A method as claimed in claim 10, characterized by

5

- collecting change information related to changes of the first file system data or of the second file system data;
- modifying the first file system data or the second file system data in dependence on the change information.
- 16. A method as claimed in claim 15, characterized by recording the change information on the medium.
 - 17. A method as claimed in claim 10, characterized by
 - collecting status information related to changes of the defect table;
 - modifying the second file system data in dependence on the status information.
 - 18. A method as claimed in claim 17, characterized by recording the status information on the medium.
- 19. A computer data system comprising a computer connected to a recording apparatus for recording digital information signals on a removable rewritable disc like recording medium, the medium comprising a user area for recording user data represented by the digital information signals and for recording first file system data comprising directory and file entries pointing to the user data according to rules of a first file system, a spare area outside the user area comprising replacement areas for defect management, a table area outside the user area for recording a defect table comprising a list of addresses of the replacement areas and defect areas in the user area, a general application area outside the user area and outside the spare area for recording second file system data comprising directory and file entries pointing to the user data according to rules of a second file system, the recording apparatus comprising
- input means connected to the computer for receiving the digital information signals;
 - recording means for recording the digital information signals on the medium;
 - reading means for reading recorded digital information signals recorded on the medium;
 - output means for outputting the read digital information signals to the computer;

- control means for controlling recording the digital information signals, characterized in that the computer is adapted to control the control means of the recording apparatus to perform the method according to any of claims 10-18.
- 5 20. A computer program product for recording digital information signals on a removable rewritable disc like recording medium, which program is operative to cause a processor to perform the method according to any of claims 10 18.